





PLATE I.

The Owasco Lake pot, restored by E. H. Gohl, 1915. The fragments of this vessel were found intermixed with hundreds of other sherds, and were sorted out by Mr. Gohl, who after painstaking effort restored the pot. It was afterwards further restored in the State Museum where the open spaces were filled in to give the specimen strength. Its height is 15¾ inches.

VOL. IV

No. 2

RESEARCHES AND TRANSACTIONS
OF
THE NEW YORK STATE ARCHEOLOGICAL
ASSOCIATION

LEWIS H. MORGAN CHAPTER
ROCHESTER, N. Y.

THE ALGONKIAN
OCCUPATION OF NEW YORK

I
GENERAL ARCHEOLOGICAL CRITERIA OF
EARLY ALGONKIAN CULTURE

BY
ALANSON SKINNER
Ethnologist, Public Museum of Milwaukee

II
OUTLINE OF THE ALGONKIAN
OCCUPATION IN NEW YORK

BY
ARTHUR C. PARKER
Archeologist, State Museum of New York



PUBLISHED BY LEWIS H. MORGAN CHAPTER
ROCHESTER, N. Y.

1923

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A 35 S 7

TIMES PRESSES
CANANDAIGUA, NEW YORK

GENERAL ARCHEOLOGICAL CRITERIA OF EARLY ALGONKIAN CULTURE

By ALANSON SKINNER

Ethnologist, Public Museum of Milwaukee

Part I.

The Algonkian Occupation of New York and Wisconsin.

From a theoretical standpoint the peoples forming the Algonkian linguistic stock must have had a common origin, or, in other words, if it were possible to roll back the years, we would find, at the date of their first advent into eastern North America, a single great primitive Algonkian tribe, speaking one tongue, and of homogeneous culture. As it is, we have had, during historic contact, a multitude of distinct tribes, conversing in dialects of the mother Algonkian often so widely separated linguistically that only a morphological study of the languages reveals their relationship. Moreover, these tribes range in culture from the archaic woodland type found in northeastern New England and the sub-Arctic, to the cavalry culture of the southern plains. We are therefore obliged to turn to the archeological remains of these peoples to learn their ancient common traits, and the extent of their former territories and early migrations.

It is of course necessary to first establish a type area for comparison, one in which we know that there was no other occupation during historic times than that of the Algonkian, and this is readily found along the Atlantic coast, where Indians of this stock were among the earliest of American peoples to come in contact with Europeans. Here we find large areas now composed of states and groups of states, known to have had no other native inhabitants, and here we have only to trace the culture of these Indians back from their known historic to pre-historic sites. This task has been performed in New England and in the Middle Atlantic states, and more recently by comparison with these districts the Algonkian culture complex has been



Plate II.

Algonkian jar, late period, showing modified Iroquois influence, East Windsor, Conn. American Museum of Natural History.

located further west in Wisconsin, and thus a set of criteria for the determination of this culture, wherever found, has been established.

These criteria exist in the various types of artifacts discovered to be constant in occurrence on Algonkian sites. The sites themselves, their situation, presence or absence of mounds, rockshelters, shellheaps, and the like, are so variable according to locality that they are less reliable for use.

A somewhat complicating feature, which we shall not treat in detail in the course of this paper, is that there can be no question but that in the east, at least, the Algonkians came into the country by successive waves, and it is possible, to a great extent, to isolate the archaic and later cultures.

Throughout the whole of New England, except for north-eastern Vermont, which was largely occupied by Iroquoian people, the following types have been demonstrated to be Algonkian. Many of these forms also extend across the St. Lawrence into the tidewater portions of Canada, where, however, we find a much more limited range of articles.

POTTERY.

Vessels of clay form one of our most important criteria in all parts of Algonkian territory. Willoughby* remarks, in his excellent article on the "Pottery of the New England Indians", that: "The first New England potters were probably Algonquian. Their earlier ware is characterized by a more or less conoidal base, the lower part of which is often massive (Figs. 3-6), and a large portion of the surface of this pottery is commonly decorated with indentations made with natural objects of simple designs or with notched sticks or other implements. Incised decorations, either alone or in connection with indented designs, occur less frequently. There is often an outer zone near the rim bearing a special design, and the inner side of the rim is often decorated."

In another place in the same article (p. 99) Willoughby refers to one more characteristic of Algonkian pottery, this

*Putnam Anniversary Volume, N. Y., 1909, p. 81.

time in comparison with that of the Iroquois. "These (the Iroquois jars) are distinguished not only by their form and decoration, but by the texture of the clay, which, in nearly all this pottery, is of good quality, and free from the coarse tempering material often used by the eastern Algonkians."

What has been said by Willoughby of the pottery from Maine to Connecticut applies with equal force to that of the



Plate III.

Pottery jars from Lake Michigan shore sites near Sheboygan, Wis. Kuehne collection.

adjoining Canadian maritime provinces, and to that from the Algonkian sites in New York, New Jersey, Pennsylvania, and Delaware.*

- (a). "The Lenape Indians of Staten Island," Anthropological Papers of the American Museum of Natural History, N. Y., 1909, Vol. III, p. 54.
- (b). "Archeology of Manhattan Island" idem p. 120.
- (c). "Archeology of the New York Coastal Algonkin," idem p. 222.
- (d). "Archeological Survey of the State of New Jersey," Bulletin IX, State Geological Survey of New Jersey, Trenton, 1913, p. 25.

*See Skinner, Alanson.

- (e). "The Pre-Iroquoian Algonkian Indians of Central and Western New York," *Indian Notes and Monographs of the Museum of the American Indian*, Heye Foundation, Vol. II, No. 1, p. 14.
- (f). "An Ancient Algonkian Fishing Village at Cayuga, New York," *idem* p. 43.
- (g). Christopher Wren, "A Study of North Appalachian Indian Pottery," Plymouth, Pa., 1914.

It is also applicable to a large part of the pottery of northern and eastern Wisconsin. In 1919 the writer, in company with Dr. S. A. Barrett of the Public Museum of the City of Milwaukee,



Plate IV.

Algonkian pottery jar, archaic type, seized from the Seneca river near Howland's Island, Cayuga Co., N. Y. Museum of the American Indian, Heye Foundation. (Collected by Alanson Skinner.)

opened twenty-one mounds and many pits in Shawano county, Wis., finding, among other things, four typical pointed base Algonkian jars bearing cord-wrapped stick impressed decoration. Others have been recorded from Brown, Door, and Sheboygan counties, where they seem to be the principal form, to say the least. The exact limits of this ware in Wisconsin are yet to be determined, but it seems to trend north and west, on through

the Rainy Lake region of Minnesota and Ontario to the shores of Lake Winnipeg in Manitoba.

What type of pottery was made by the Siouan Winnebago of Wisconsin is not definitely known. It is quite possible that they aped Algonkian material culture in all its branches quite as slavishly as they have always done in historic times.

For the region between Wisconsin and Pennsylvania we lack data, but believe Algonkian pottery is certain to be recorded from the Canadian Niagara frontier. It is likely to be found from northern Michigan and western Ontario. It is known now in northern Indiana, Illinois, and in Ohio.

Shetrone, in a recent paper on "The Culture Problem in Ohio Archeology"* presents good evidence of the existence of Algonkian sites in that state, but merely remarks that the development of pottery as observed on these is weak, a statement which is not specific enough to be of value. Investigation of sites and examination of specimens is needed for this region.

From the Potomac southward along the Atlantic seaboard much pottery of the Algonkian type has been recorded. Holmes in his monograph on "Aboriginal Pottery of the eastern United States"* gives the southern limits of the area as a somewhat indefinite line extending from below Cape Hatteras, on the Atlantic coast, through southwestern Virginia, eastern Kentucky, middle Ohio, northern Indiana, northern Illinois, and middle Iowa to Nebraska and beyond. This statement the writer concedes to be closely approximate to his own views.

STONE WORK.

In stone work of all kinds the Algonkian was pre-eminent. In the New England and Middle Atlantic states, and in Wisconsin, they were Algonkian hands that fashioned the various forms of stemmed and notched points and blades of chipped stone, ranging greatly in size and often of bizarre shapes. Unlike the Huron-Iroquois, the members of this stock were not wedded to the use of the tiny triangular arrow point alone.

*American Anthropologist, N. S., 22, No. 2, page 165.

*Twentieth Annual Report of the Bureau of American Ethnology, p. 145.

Of Algonkian provenience, in all the districts named above, are, the bird and bar amulets, bannerstones, tubes, monitor pipes, and the handsome slate gorgets, particularly those having two or more holes. In Wisconsin, Minnesota, and southern Ontario, these statements with regard to the types of chipped "flints" and "polished slates" also hold true, and the same may be said of certain pecked stone implements, save that there are greater local variations. About the Gulf of St Lawrence the stone plummet, gouge, grooved adze, and long flat celt are characteristic. In southern New England the grooved axe and adze, the long cylindrical pestle, semi-lunar knife, monitor pipes, bird stones and banner stones appear. Many of these are found continuously across the intervening country all the way to Minnesota, but it may be taken as a general truth that the gouge and adze are more abundant throughout the northern part of this range, and the ceremonial slates occur with greater frequency in the southern portion. The grooved axe is always accompanied, and sometimes supplanted by, the celt, and in Wisconsin the far famed fluted axes appear. In Michigan another form of grooved axe, with projections at either side bounding the grooves, is to be noted. The plummet and semi-lunar knife are rare outside of New England, where they may be one of the marks of an early wave of Algonkian migration. Plummetts, however, are found in some numbers in Wisconsin.

The Algonkian made good platform or monitor pipes, and some of the tubular variety, in the east. In the north the Miamae type was his, while in the west he bartered for Siouan pipes of eatinite or copied them in the same or inferior material. He rarely produced a pipe as good as those of his Siouan, Iroquoian, or Muskogean neighbors, nor did those of his handicraft rival the finds in the Ohio mounds. The coarse Algonkian pipes of clay at best never approached those of the Iroquoian peoples, including the Cherokee.

BONE AND ANTLER WORK.

In bone and antler the Algonkian was little adept. His work was always crude, and even in the east, under Iroquois tutelage, he never learned the cunning of his conquerors in

fashioning implements and ornaments. Almost all Algonkian bone work is utilitarian. Awls, punches, a few arrowheads of limited types, hide scrapers of the draw shave form, turtle shell cups, occasional tubular beads, and rarely, a fishhook or harpoon, cover the usual list throughout the territory in question.

SHELL.

While the eastern coastal Algonkians have the credit of being the aboriginal wampum and shell bead makers of the



Plate V.

Algonkian jar, archaic type, Port Washington, Long Island, N. Y. Museum of the American Indian, Heye Foundation. (Collected by M. R. Harrington.)

country, par excellence, the finished product is excessively rare on their sites, and even debris of their work is not often abundant. A few coast sites yield conch columellae, rejects of white wampum manufacture, and square fragments of the blue lip of the hard clam, blanks for black wampum making, in abundance. Judging by archeological evidence alone, their shell work was even less developed than their craft in bone and antler. They had some cups, beads, and possibly even gorgets, of shell, but

these were evidently rare, and were better known in the western part of their range than in the tidewater region.

COPPER.

Possessing the great copper mines near and on the southern shore of Lake Superior, the Algonkians of the middle west were naturally skilled miners and metal workers. The copper was heated and hammered, never smelted. A myriad forms of utensils and some ornaments were made, some of which penetrated even to distant New England by way of trade, and almost all Algonkians seem to have had a few. It is quite possible that the copper mines formed such another mecca to the Algonkians as the Catlinite quarries did to the Sioux.

No Algic metal work was ever quite so good as that of the Ohio mounds, nor the repousse plaques and plated ornaments of the stone graves in the Gulf region, but it was often very creditably done. The Iroquois had none of this copper, except for a few stray pieces which found their way into the hands of the Huron and Neutral.

MOUNDS.

In certain portions of their range, at least, the Algonkians seem to have built mounds. These were, in northern Wisconsin, simple linear or semi-spherical forms, sometimes combined to make the so-called "cat-fish" type, a linear ending in a round or flattened head. These mounds contain flexed, bundle, or cremated burials, and sometimes examples of the typical pointed bottom jars appear as accompaniments.

The artifacts from some New York mounds are notably similar to those found on Algonkian sites. For example, the famous mound on Long Sault Island, in the St. Lawrence, the contents of which are now to be found in the Museum of the American Indian, Iieye Foundation, and the American Museum of Natural History, both of New York city, are, in part: Stone gouges, native copper beads, slate tubes, huge flint and quartzite blades, and the major part of a pottery jar of late Algonkian type, (probably having an oval rather than a pointed base, but with typical decoration, etc., of a later Algonkian period).

CRITERIA OF ALGONKIAN CULTURE.

To recapitulate briefly the criteria of Algonkian culture are these:

- I. The coarsely made clay vessel with pointed base, commonly with impressed designs; decoration, however, being a variable feature.
- II. Weak development of clay pipes; effigy forms virtually unknown, and tubular forms, either straight or bent, predominating.
- III. Abundance of stone work, of excellent quality, including:
 1. Bannerstones of many types.
 2. Two holed gorgets.
 3. Bird and bar amulets.
 4. Monitor or platform pipes.
 5. Grooved axes and adzes.
 6. Gouges.
 7. Long cylindrical pestles.
 8. Stemmed and notched arrowpoints and blades of many types. Drills and scrapers of many designs. To these more general types may be added the following local developments:
 9. Steatite vessels, oval, with handles at the ends. New England, Middle Atlantic, and Chesapeake Potomac regions.
 10. Semi-lunar knives, occurring in New England.
 11. Fluted grooved axes and celts in Wisconsin; grooved axes with projections at the groove from Michigan.
- IV. The extensive use of native copper for utensils, and to a less extent for simple ornaments, such as beads and gorgets.
- V. Weak development of bone and antler work.
- VI. Poor development of work in shell.
- VII. Mounds in New York and Wisconsin. In New England and New York some enclosures and embank-

ments are known. These are probably a late development under Iroquois influence.

VIII. Extensive use of rockshelters where available.

IX. General occurrence of the single flexed burial, commonly without accompaniments, in New York, New England, and New Jersey at least. Bundle burials not uncommon. Ossuaries of the Huron-Iroquois type unknown. In the east the use of real cemeteries is less common than the custom of burying the dead in fireplaces and refuse pits throughout the village site.

No study has as yet been made to ascertain the degree to which these features, known to be typically Algonkian, overlap with, or are common to, other cultures outside the area in question. It is quite probable that several types of the articles noted above are general in their distribution, although an attempt has been made to omit such common types as celts, pitted hammerstones, and stone netsinkers, as are not significant because of their wide distribution.

It is desirable in noting the types of specimens to record the circumstances of their discovery—whether they were or were not associated with alien culture complexes. For instance, undoubted articles of Algonkian type and make are sometimes found on the later Iroquois sites colonized in historic times by captives.

One other subject worthy of consideration is the extent to which the Algonkian culture complex has been affected by outside ideas. It does not seem likely that the Siouan tribes of the middle west have exerted much influence, for there are few if any indications of archeological novelties in Wisconsin and Minnesota, where such intrusions might be expected. On the other hand, so far as can be seen, the Siouan tribes of the forests of the central west always were and still are dominated by Algonkian material culture.

In the east the case is different, the Iroquois imposing much of their culture on the neighboring Algie peoples.

During the period just prior to colonization in tidewater

New York, the Algonkian tribes of that region began to come under the rule of the Iroquois, and as a result, their material culture underwent considerable modification. This change became more and more pronounced as time advanced, and the eastern Iroquois, especially the warlike Mohawk, obtained firearms and extended their conquests.

As this cultural metamorphosis has been dealt with more fully elsewhere* it is not necessary to go into any great detail here. Suffice it to say that the Algonkian tribes affected gave over the manufacture of their archaic pottery, especially the pointed-bottom vessels, for Iroquois forms. They abandoned much of their beautiful work in stone, and revived and enlarged their handiwork in bone and antler. Changes in the subjective life of these Algonkians, and in perishable material objects, were doubtless also made, but few traces have survived.

The extent of territory over which these innovations were wrought is not yet fully known. All the tribes dwelling on the Hudson were decidedly affected, the Mahikan proper, and the Muncey, undergoing radical changes. The Manhattan, Wickwaesgeek, and Siwanoy territories Northern Staten Island (Haekensack), Western Long Island (Canarsie, Rockaway, etc.), were strongly influenced.

Southern Staten Island and eastern Long Island remained very little modified, as did the main body of the Unami Delaware at Trenton, N. J. In all these cases, however, occasional examples of Iroquois ware, etc., are found, but these are rarities, and the pure Algonkian culture of these regions was not altered.

How far Iroquois culture went to the east, in New England, it is not possible to say. Traces may be seen in pottery in the Wampanoag collection from Warren, Rhode Island, in the Museum of the American Indian, Heye Foundation, but these look more like western Iroquois ideas, as are those shown in the pottery jars from Deerfield, Mass., preserved in that village. An interesting contemporary statement, made by Giles in his *Memoirs* concerning the Penobscot in 1689, throws light on this subject.

*See Footnote 2, E.

“They often had terrible apprehensions of the incursions of those Indians (Mohawk). They are called also *Maquas*, a most ambitious, haughty, and blood-thirsty people, from whom the other Indians take their measures and manners, and their modes and changes of dress, etc.”

To the westward, nothing has been recorded to show whether the western Iroquois group imposed their culture on their Algonkian neighbors, though this may have been the case. In central New York at least, the pure Algonkian remains, all apparently of prehistoric times, indicate the expulsion of these people by the incoming Iroquois hordes was too abrupt for cultural changes to gain a foothold.

Part II.

The Cultural Position of the Archeological Remains of Wisconsin.

The problems encountered by the student of Wisconsin Archeology are primarily three in number. First, by whom were the mounds and earthworks built? Second, to what peoples and cultures are the artifacts found upon the camp, village, and cemetery sites within the borders of the state attributable? And third, what relationship, if any, do these bear to the mounds and their makers? Fourth, whence came the Indian tribes found inhabiting Wisconsin by the first white explorers.

Of these questions the first and third are at present in process of investigation. The Wisconsin Archeological Society through years of persevering effort has assembled data and clues for the service of trained scientists, and the Public Museum of the City of Milwaukee, under the able leadership of its director, Dr. S. A. Barrett, has recently inaugurated a series of intensive studies of typical mound groups, the results of which bid fair to open an entirely new field of knowledge concerning the authorship and purpose of this class of antiquities, and, moreover, already show a tendency to answer the third of our series of questions, namely, that referring to the relationship of the makers of the types of artifacts with the builders of the mounds. This leaves the second and fourth queries unanswered, and it is the purpose of this brief essay to attempt first, to show the

relationship of a large portion of the nonperishable remains emanating from the state with a definitely established culture known to students by researches made in other localities, and second, to point out a possible source of origin for the historic tribes of Wisconsin.

In considering the artifacts from within Wisconsin boundaries, it must be remembered that in historic times there have been recorded as native to the region various Indian tribes of three different linguistic stocks, the Algonkian, Siouan, and Iroquoian. Now, while the names here given refer *a priori* to the linguistic affiliations of the three peoples, nevertheless it has been proven, in the cases of the first and last groups at least, that the tribes composing the parent body were somewhat homogeneous as to material culture, enough so that their archeological remains may be conveniently placed under the same title that binds them together from the point of language. With the Siouan the case is yet unsettled, for, with the exception of the exploration of certain Mandan sites in North Dakota, no archeological work worthy of the name has been done which can furnish us with criteria for the determination of the constant features of a definite culture complex. Inasmuch as we lack the necessary data, therefore, the problem of the Siouan origin of certain remains will be left for later consideration.

With the Iroquoian culture the matter is different, for here we have an abundance of material to go by. In Wisconsin Iroquois occupation came in two waves, neither of which left any profound mark on the general features of the area. The first was the influx of fugitive Tobacco Nation Huron, the later Wyandot, who sought asylum in the northern and eastern part of the state towards the close of the Huron-Iroquois wars. They did not long remain, but it is known that they had fortified towns on Green Bay, and from these may be expected the same typical pipes and pottery, bone implements, and triangular arrowpoints that mark their sites in the Ontario peninsula. Indeed the West collection of pipes in the Public Museum of the City of Milwaukee has several examples of true Iroquois pottery pipes which may be attributable to the Huron sojourn, and there are both pipes and potsherds in the collection of Mr. J. P. Schumacher, from

the counties bordering Green Bay, which can be the handiwork of no other people. The last visitation of an Iroquoian people to Wisconsin was occasioned by the transfer of the larger part of the Oneida tribe to Green Bay, in the early part of the last century. Then and thenceforward this progressive group was already so far advanced along the road of white civilization that it left no archeological impress on the region.

There remains the Algonkian complex for our disposal. In historic times the greater part of the northern and eastern part of the state has been populated by tribes of this stock. True, the Siouan Winnebago have always dwelt among them, but, so far as their ethnology is concerned, their arts and manufactures are so similar to those of their Algonkian neighbors that they cannot be distinguished, and this may eventually be proven to be the case in prehistoric times. Certainly we find, so far as our knowledge extends, few types of artifacts peculiar to known Winnebago sites and not to those of their Algonkian neighbors, except certain still hardly known forms of fictile ware.

The artifacts which are features of the region occupied by the Algonkian tribes of northern and eastern Wisconsin may be briefly listed as follows:

I. Pecked and Polished Stone.

1. The grooved axe, in numerous forms, including the famed fluted type found only in Wisconsin.
2. The stone gouge.
3. The grooved adze. Similar to the common New England form.
4. The groveless adze with triangular cross section.
5. The grooved pebble net-sinker, generally grooved across the long axes.
6. Banner stone ceremonials, in some variety.
7. Stone cones.
8. Bird amulets.
9. Bar amulets.
10. Gorgets, two or multiple holed.
11. Platform, Micmac, pebble, and Siouan pipes.

II. Pottery.

1. Coarsely made jars with stamped or pressed decoration predominating, and conical bases.
2. Crude clay pipes.

III. Copper.

1. A large number of forms, celts, awls, arrows, spears, fishhooks, principally utilitarian, but beads, ornaments, and butterfly ceremonials (bannerstones) are known. The repousse and overlay forms of the Ohio mounds and the gulf region do not occur.

IV. Chipped Stone.

1. A multitude of stemmed, notched, leafshape, triangular, serrated, and even unusual forms, with all varieties of drills and scrapers, covering a wide range of material. In the cases of the knives and blades, these are often of large size, but some types of arrowpoints are diminutive.

V. Shell.

1. A limited number of cups, beads, gorgets, and ornaments, also whole shells of a large species of conch from the Gulf waters, have been recorded, but the development of work in shell was weak.

Part III.**The Origin of the Algonkian Indians of Wisconsin.**

In the foregoing pages we have dealt with the archeological criteria and problems of two great archeological cultural areas. Central and Western New York and Southern Ontario, and Wisconsin. A careful study of the evidence regarding the latter at once suggests two important points. First, that all the remains of northern and eastern Wisconsin are relatively recent in origin. Second, the artifacts that occur on the sites under discussion are remarkable for their similarity to those found on the Algonkian sites in the region to the east that has just been characterized.

In fact the resemblance in type after type is so striking as to amount to identity almost throughout the culture complex.

Mounds, it is true, occur in Wisconsin far more abundantly than they do farther east, and of a different type. They do not impress one as being ancient, like those of the Ohio valley culture that cross southwestern New York as far east as the valley of the Genesee. On the contrary, they seem relatively new, and some of the simpler forms contain Algonkian artifacts, when they contain anything other than bones, that may be duplicated on the nearby historic sites.

Thus, out of a large number of mounds explored by the writer and Dr. S. A. Barrett, Director of the Public Museum of the City of Milwaukee in 1919, only two yielded mortuary deposits of artifacts and in both instances these were typical pointed base Algonkian pottery jars, counterparts of those from Central New York and adjacent Ontario. Even the famous effigy mounds of Wisconsin seem to have been erected in late pre-historic times by the Siouan Winnebago.

The writer wishes to reiterate that except for some special local developments of minor importance, such, for example, as the fluted stone axe and celt, there is almost nothing in the way of stone, bone, clay, or copper from either region which does not find its counterpart in the other.

We now come to our fourth question in the preceding section, that having reference to the origin of the Algonkian tribes of Wisconsin. Turning to the ethnology of these tribes, if we except the Ojibway, whose culture being non-intensive has caused them to assimilate many traits from their neighbors, and who have probably dwelt in northern Wisconsin longer than any other "native" tribe, we find that the area was occupied at the arrival of the whites, by most of the tribes of the so-called "Central Algonkian" group. This includes the Menomini, Potawatomi, (both Forest and Prairie bands, almost two separate tribes,) Sauk, Kickapoo, Fox, and even Miami. The latter, and perhaps the Kickapoo, who early migrated south, we may discard as non-permanent residents. There also the Siouan Winnebago, who had not long since

separated from their close relatives, the Ioway, Oto, and Missouri. All these peoples while speaking a radically different tongue, have, in historic times at least, possessed a material culture based almost wholly upon that of the Central Algonkians with whom they fraternized, and whose migrations they may have shared.

For the Algonkians we have the repeated testimony of the Jesuits that they had all but recently come into the present state of Wisconsin from points farther east, mainly in Michigan, to be specific. The statement is also made that some at least fled under Iroquois compulsion. The Menomini seem to have been the first to arrive, and have a tradition to this day that the first Menomini was transformed from a bear that came out of the ground at the mouth of the Menominee river. Yet they also have a tradition of a home farther east, on the sea, which is known only to a few of the older men. They declare that the Winnebago, who have a similar origin myth making themselves autochthonous, were always near them, but that all the other Algonkians came from across Lake Michigan and settled near them, later on.

The Sauk and the Potawatomi of the Prairie have a myth of origin far to the east. In manuscripts in my possession I have a definite claim on one part of the Potawatomi that they once resided near the salt water, and were neighbors to the Delaware. But there is strong internal evidence of close relationship of all these people with the coastal Algonkian tribes of New York and New England. If one will take the rituals of the Prairie Potawatomi for example, and analyze the prayers and chants, one will find that no matter to whom they are ostensibly addressed they continually shift their allegiance over to those archaic Algonkian deities, the Sun, the Fire, the Water, (or the Sea), and the Gods of the Four Quarters of the Universe. These are the very Gods that Roger Williams enumerates as the principal deities of the Narragansetts in 1643.

Language, traditions, ceremonies, all link the Central Algonkians with the east, although influence, especially in modern times, from the western plains is not to be denied. Yet the ancient, the archaic, beliefs, are eastern.

Whence came the Central Algonkian peoples of Wisconsin?

The writer will hazard the following hypothesis: As has been demonstrated, throughout southern Ontario and Central and Western New York we have evidence of an extensive Algonkian occupation of long duration, upon which, in comparatively recent times, is overlaid the alien culture of the Iroquois.

When the Iroquois invaded the region of their historic seats they disturbed and drove out the resident Algonkian hordes, and it is the belief of the writer that these fugitives gradually withdrew westward, pursued and harrassed by both the Five Nations and the Huron, (the latter are well known to have raided the Potawatomi, the so-called "Fire Nation," of Michigan, long after white occupation). They passed through Michigan, along the northern part of the southern peninsula, a part of them remaining there while the greater number went through the straits of Mackinac to Green Bay and the western shore of Lake Michigan.

This leaves one further problem, the position of the Winnebago and related Siouan tribes. Two hypotheses are possible. One, that they were indigenous to Wisconsin, the other that they accompanied the fleeing Algonkians from some point farther east.

The first theory may be answered by the arguments brought forward in favor of the second. In Wisconsin we find that the archeological specimens so far definitely known to be attributable to the Winnebago closely resemble those of the Algonkians, varying, so far as can be determined, very weakly in the matter of pottery forms, and, possibly, in types of flint arrowpoints. There seem to be no remains attributable to the Winnebago in the state that are older than those of Algonkian origin.

The probability is then that these Siouans accompanied the fugitive Algonkians from their eastern home, perhaps originally farther south along the Atlantic Coast, near their Catawba, Santee, and Tutelo relatives. As it is probable that the home of the New York Algonkians was once farther south along the coast, these Siouans may have cast in their lot with them at some time in the dim past, migrated with them to New York, and thence westward.

The lack of distinctive points of eastern Siouan culture makes this problem harder to solve than that of Algonkian or

Iroquois. Except, possibly, the Winnebago, all the Siouan tribes mentioned here were builders of earth lodges at one time. Earth lodge mounds have been found in northwestern New York about Perch Lake. Do they occur elsewhere along the probable line or lines of march, north or south of the lakes to Wisconsin?

OUTLINE OF THE ALGONKIAN OCCUPANCY IN NEW YORK

By ARTHUR C. PARKER

Archeologist, State Museum of New York

Long before the coming of the Iroquois tribes to this specific region,—that is, the area now embraced by the state of New York,—the Algonkian tribes had held this territory as their domain. An examination of any good map of the distribution of the various linguistic stocks of America will plainly show why this was so. The Algonkian tribes occupied a fan shaped area, with its handle in the Rocky mountains of Alberta and Montana, thence sweeping eastward from the headwaters of the Missouri, the North and South Saskatchewan, northward to Hudson Bay, and around it through the entire interior of Labrador, save where the Eskimo claimed the coastlands; southward from Manitoba through northern Minnesota, embracing Wisconsin, Michigan, eastern Iowa, Illinois, thence eastward through Kentucky, northern Tennessee to the Appalachian barrier east of which lived tribes of the Sioux and Iroquois. The Algonkian stock enfolded the three westmost great lakes, but Erie and Ontario and the St. Lawrence basin fell later into the control of the northern Iroquois, but New England was the unchallenged domain of the Algonkian people. All this immense tract, the finest land of North America, was the homeland of the Algonkian stock, but its very vastness invited intruding peoples.

Never a closely knit people, the Algonkian tribes were in contact with the Athapascan stock on the north-west, with the Sioux who pressed eastward from the valley of the Missouri and with the Muskogean tribes of the south. In the north-east they touched the Eskimo.

With such an immense range it is not surprising that they present a diversified culture, for added to their contacts was the disposition to copy the advantages and devices of their circumjaacent friends and foes. This trait led bands of Algonkian people to travel afar from the body of their mother stock and to become surrounded by other peoples. Thus, the

Cheyennes and Arapahoes of Wyoming and Colorado were the neighbors of the Sioux, the Kiowa, the Caddo and the Shoshone. Likewise the coastal Algonkians were far removed from their western kinsfolk, due to the later intrusions of the Iroquois. But at one time the Algonkian people controlled all this region, being in all probability the first extensive branch of the American Indian family to occupy eastern North America, north of the Gulf states and south of the Labrador hinterlands, unless we except in the north from the forty-second parallel, a possible occupation at an early time by wandering bands of the Eskimo, but then, the Eskimo were never a numerous race.

With such an area over which to roam, there must have been much wandering before each specific group and sub-group found a suitable resting and abiding place. Fixation was hastened by the growth of the tribes and when each had become relatively large wandering ceased, for intrusions would be resisted and estopped by force of arms. At this period the great tribes grew to maturity and attained definite characteristics. Difference in development and in contacts produced differences in the mother culture. As the tribes waxed strong in their relatively fixed abodes the younger element became restless and yielded to the irresistible impulse to search for adventure in foreign regions. Long journeys were undertaken and sister tribes were visited. Frequently some fair far spot would prove attractive, frequently misunderstandings would arise and as frequently a pure desire to play the game of war would lead the visitors to seize tracts of territory more or less remote from their own immediate homes. In this manner, within the Algonkian area itself, various *stages* of culture are represented, as well as various phases of that culture.

PERIODS OF OCCUPATION.

In the State of New York there seem to have been at least four stages of the Algonkian occupation. By this I mean four cultural stages. Each stage may represent an occupation by one or by numerous tribes of similar cultural standing.

The first or archaic occupation yields crude implements, such as large and clumsy arrow points, but occasionally very

fine spear heads, many net sinkers, hammerstones, choppers of naturally flattened stone, some fragments of steatite vessels and rude tools of large cherty flakes. Pottery does not appear until the archaic stage has well advanced toward the secondary period, and pipes are apparently entirely absent. No bone implements are found in the refuse pits and no charred corn.

The secondary stage of the Algonkian occupation is represented archeologically by a better grade of arrow points of the notched type, a larger variety of spears, javelin heads and knives, by roller pestles, by crude pottery the surface of which is stamped with corded impressions, by drills, scrapers, by grooved axes, celts and adzes, and by such ceremonials as the birdstone, bannerstone and gorget. Bone implements appear, especially bone awls, harpoons, beads and tubes, nearly all poorly made. Charred corn and other vegetable traces are found in the refuse pits. Agriculture was a growing art. Occasionally copper objects are to be found. The second Algonkian occupation was that of tribes with more sedentary habits and with better social organization. They were culturally richer than their predecessors. A few graves of this period have been found. The skeletons are uniformly in the flexed position, though there are many accounts, all unsubstantiated by competent observers, of skeletons "sitting up".

The third stage of the Algonkian culture is a complex one and in special localities presents many variations, showing not only evidence of contact and borrowing but also of individual development. Evidence of the second and third stages of Algonkian occupation may be found throughout the entire habitable portion of the state. It was wide spread.

This stage shows that the Algonkian tribes were growing in the culture scale and learning much. One learns this from the characteristic artifacts which embrace a wide range of articles, including numerous finely chipped flints of the notched type, large triangular flint arrow points, by steatite pottery, clay pottery, notched choppers, celts, adzes, gouges, grooved axes, hoes, some copper implements, as spear heads, small chisels or celts, and beads, numerous gorgets, bannerstones, birdstones,

boatstones, numerous roller or cylindrical pestles, quantities of hammerstones, pipes of stone and clay, including some well worked monitor pipes and generally poor clay pipes, save occasional "elbow pipes" of a class that would be classed as mediocre with the Iroquois, numerous net sinkers, some rather inferior bone implements, some plummets and a few spools. This is hardly a complete list of implements, but will afford an index. The third Algie occupation in its refuse pits yields a considerable amount of corn and other vegetable foods, as hickory nuts, beans and a rare squash stem or two. Burials seem to have been of several types,—aerial, ossuary and individual flexed. Burials vary in the type of implements interred with the skeleton. Most of the burials yield nothing, but in certain places where the "mound culture" had penetrated and taken hold, some very fine things have been found, and the entire site can hardly be distinguished from a mound site in such an area as Ohio, for example.

It will be noted that the Algonkian people were strong in their work in stone, mediocre in clay, and poor in bone and shell. They were, however, workers in copper to some extent, in this differing from the Iroquois who would not use it.

In the third stage the Algonkian people reached the highest stage of their native development, and in that stage they learned most from other stocks. Likewise in that stage the higher branches of their own stock radiated the greatest social and cultural influence, to the extent of colonizing isolated parts of New York, apparently without much resistance from their less equipped neighbors. These people built towns and erected stockades, possibly copying them from their Iroquoian foes, they imitated the culture of the Mississippi basin, they had large tracts of agricultural land, but were inferior to the later Iroquois in this characteristic. They built small mounds, buried to some extent in ossuaries, and worked chert pits and ledges for their stone supply, as at Cocksackie.

The fourth stage of the Algonkian occupation is that of the historic period. Sites of this period are to be found on Long Island, along the Hudson, and along some of the larger streams, as the Delaware. One large site has been investigated in the

Neversink near Port Jervis. Such sites yield considerable in the way of shell articles, though there is little to prove that they themselves made this shell work. In this period in New York the native culture of the people faded out for the intrusions of the colonists and the pressure of the Iroquois left them little that was distinctively their own. Unlike the more vigorous Iroquois they did not hold to their native seats or to their own material culture, save in the latter instance, when far removed to isolated spots, as with the Oklahoma Delaware.

The best works for the archeologist on the Algonkian people have been written by Alanson Skinner, and the reader is invited to study his monographs in the publications of the Museum of the American Indian (Heye Foundation), the American Museum of Natural History and the Public Museum of Milwaukee. Mr. Skinner has had extensive experience not only with the living Algonkian tribes but also with the ashes of their ancestors from the shores of Long Island to the lake lands of Wisconsin.

AN OUTLINE OF ALGONKIAN CULTURAL ARTIFACTS.

Methods of Identification. In any endeavor to determine the cultural significance of any artifact there must be a certain and definite means of comparison. To fix the characteristics of a culture we must have before us the results of actual excavations and collections made in and on a site. In other words, we must reason from the known to the unknown. Once we know the characteristics of an Algonkian site we may look elsewhere and say with some degree of positiveness what is Algonkian. But to know in the beginning what is Algonkian we must find a site actually known to have been occupied by some Algonkian tribe and after examination we must find what the objects are, how they look, how they are decorated; and, what is equally valuable, we must determine what objects are associated. Not only must we study the ash pit and refuse heap, but the house site, the village site, the camp site and the fishing grounds.

Once we know the characteristics of a historical site, which may have within it European artifacts, we may look for older sites in which traces of the white man are absent. Once the pre-colonial sites are known and the characteristics of their

objects determined, we may look for still older sites. Then, when the general characteristics of the Algonkian culture are known we may say with some degree of assurance that a specimen is or is not Algonkian. If it is not Algonkian, what is it? Does it belong to the later Iroquois or does it belong to another culture altogether?

One can easily understand through these suggested inquiries how extremely important it is to make a record of every discovery and to mark each specimen in such a way that the place where it was found may be known. The collector who simply collects for the mass of relics he can jumble together is nothing more than a vandal, who to gratify his lust for acquisition, destroys the only clues we have by which science may reveal the man of yesterday.

An examination of the numerous Algonkian sites in New York, and indeed elsewhere, demonstrates that the Algonkian culture was not uniform. This is not strange when we remember that the great Algonkian stock embraced many tribes and influenced this geographical area from comparatively remote times. It is natural to suppose that certain tribes varied in minor particulars from others and that in the process of time tribes may have changed some of their customs. There is an abundance of proof that this process of cultural change took place among tribes observed since the advent of the European. Changes took place, it is reasonable to suppose, in the eras before the white man came.

While it is true that our knowledge of the various occupations is incomplete, enough sites have been examined by competent observers to afford some basis for comparison and identification. The description which follows is a brief attempt to outline the characteristic artifacts of the Algonkian culture.

Chipped Implements. Nearly all the periods of the Algonkian occupation, where there was any considerable population, are characterized by innumerable chipped implements of chert, quartz, hornstone and other flinty rocks. The material to some extent varies with the location, the local rocks predominating, but favorite materials are not lacking; thus, even on the sea-

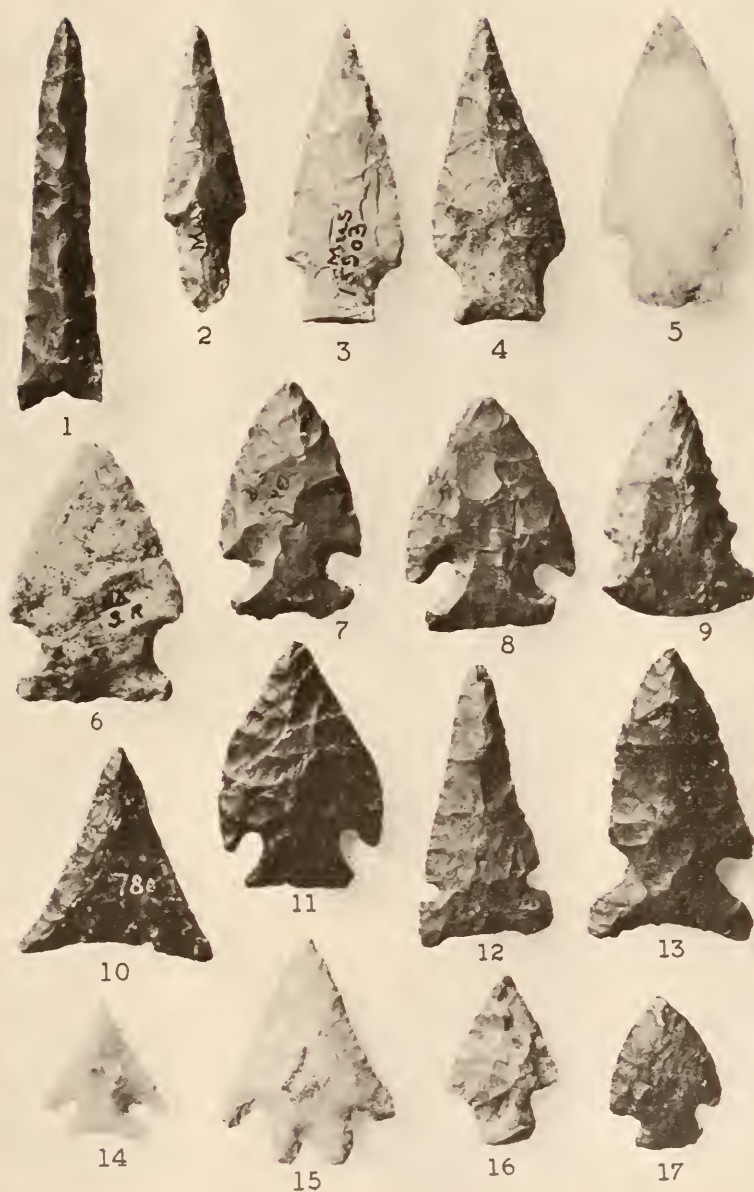


Plate VI.

Certain types of New York arrow points. $\times 7/8$. From Algonkian sites.

1, dark chert, Livingston Co.; 2, chert, Livingston Co.; 3, chert,

shore where nearly all the chipped implements are of pebble quartz, jasper and chert points are to be found.

Spear points occur in abundance and vary in size from three inches to ten inches, with occasional specimens below and even above these measurements. Not only do these implements vary in size but in degree of workmanship, some being crude and clumsy, others revealing the skilled hand and eye of an expert. With the possible exception of some knife blades and unfinished blank forms that if necessary could have been used as spear points, all Algonkian spear points and javelin heads are notched or barbed.

Arrow points are numerous on all Algonkian village and camp sites and along trails of this occupation. Like the larger points considered as spears, Algonkian arrow heads are barbed, or at least have distinct necks and shoulders. No less than forty distinct forms of these arrow-heads are recognizable, and into these forms are types of variants that in some particulars resemble one form or another or several. The sorting of a large collection of points becomes a most perplexing problem and, for a time, it seems that one is pursuing an impossible task. While many arrow-points seem to be individual and without previous or similar pattern, a close examination and comparison will usually fit the specimens into one or more classes, to be determined by the shape of the neck, barbs, shoulders, point or bevel.

Frequently in sorting a large collection of arrow-heads two or more may be found that are so similar in size, shape and technique as to suggest having been made by the same hands or gauged by the same pattern. It is quite possible that many points, especially if from the same site, were made by the same arrow-maker.

The Algonkian tribes used triangular points, popularly

Livingston Co.; 4, dull chert, Seneca river; 5, marble quartz, Long Island; 6, gray chert, Seneca river; 7, slaty chert, Seneca river; 8, slaty chert, Jefferson Co.; 9, serrated rotary or beveled, Seneca river; 10, dark chert, Seneca river; 11, orange, red and black jasper with white bands, Seneca river; 12, gray chert, Seneca river; 13, gray chert, Seneca river; 14, waxy chalcedony, Oneida lake; 15, light gray chert, bifurcated stem, Rush; 16, chert, Livingston Co.; 17, Monroe Co.

termed "war points", but, as a general rule did not make them with the same degree of skill as the later Iroquois. In most cases, too, the Algonkian point is larger than the Iroquois. Certain Algonkian sites, as at Owaseo Lake and Castleton-on-the-Hudson, yield triangular points almost to the exclusion of other types, but these sites seem to have belonged to the period of Iroquoian influence.

Knives. Chipped stone knives are commonly found on Algonkian sites. Frequently knives are confused with spear-heads, and, indeed, many knife-blades might have been employed as spear-points and vice versa. The distinguishing feature of a knife is its curved edge. Most knives are thinner than spear-heads and have an even edge, that when tried by the thumb feels sharp. A spear may have a rough or an irregular edge. Many knife blades have no notched shoulders, and many of them are small. Some are oval, some round, some lanceiform and some petaloid. One type of the double pointed blade has one of the pointed tips slightly notched on either side, but on unmixed sites these are very rare and seem to be the products of another culture. Algonkian knife-blades are generally made from better material than spear-heads and arrow-points. The material is better chosen and free from defective spots. Some very fine specimens of knife-blades are made from jasper, chaledony, quartz and fine grades of chert. Many are of unusual length, from six inches to ten or more.

Scrapers. Scrapers are commonly found on sites of the Algonkian occupation. Several forms occur, due in some measure to the different ways in which scrapers were used, as with or without handles. One common form of the scraper is that having the under side a smooth curved surface, and the other humped or "turtle backed". Scrapers of this kind may or may not have been employed in handles, but very few of them are notched at the handle end. A second form is chipped on both surfaces but the scraping edge is beveled one way, to give a chisel-like surface. Many of this type are stemmed and notched. A third form is made from abruptly broken arrow or spear-heads. The fractured edge is simply

chipped back from one side to provide the chisel edge for scraping. Scrapers are also made from flakes and many were formed from larger blades, the sides of which were used for scraping and not the ends. Some knife-blades show that the upper or handle-end was used as a scraper. Of course not all scrapers were made of chipped flint or chert. Some were made of tough slates, granites and sandstones, and ground down in the form of small adzes. These come under the head of polished stone implements.

Perforators or drills. Perforators are found on Algonkian sites but probably none has been found on Iroquoian sites that are original. Several types of perforators are found on sites of the Algonkian occupation. Among these may be mentioned the long slender shafts of flint or jasper that are of a diameter nearly uniform. These may or may not have shoulders and necks. The usual type may be fastened to a shaft so as to permit thereon a rotating spindle driven by a bow string or by the motion of a pump drill. Another type has a very rough, massive top, as if this were a handle to be used without a spindle. Not all so-called perforators were in reality drills; at least not all were constantly used as such, for both human and animal bones have been found pierced by them in such a manner as to indicate their use as arrow points.

Disks. Disks of various sizes have been found along the Susquehanna. A considerable number come from the Chenango and Chemung valleys but specimens from the tributaries of all these streams are to be found. As a rule these disks are chipped from flat layers of sedimentary rock, except slate, and in thickness are from one-fourth to one-half inches. Some have been found down the Susquehanna as far as below Wilkes-Barre. These disks are sometimes termed, "pot covers" perhaps because they are round, are notched in many instances, and because the larger specimens are about the size of the top of a small pottery vessel. Those who use this term, however, forget that the greater number are much too small to be pot covers, unless all pots with three inch tops have "crumbled into dust upon exposure to the air". It seems far more probable that notched disks were simply a local form of the usual net-sinker.

STONE TOOLS.

Hammer-stones. Nearly all Algonkian sites are characterized by an abundance of hammer-stones. Several types are to be found, ranging from a naturally formed pebble or small cobble to an artificially formed grooved head, symmetrically shaped and polished. The commoner types are ordinary cobbles that show evidence of impact: discoidal pebbles with pits in the center on either flattened side, (the ordinary pitted hammer-stone); and chunks of chert and quartz that have been battered into spheroids by much use. There is nothing more distinctive in Algonkian hammer-stones except perhaps some ball-like hand hammers.

Pestles. The ordinary Algonkian pestle is cylindrical in form, and long. The diameter varies from one and one-half inches to four inches. A few pestles are as short as six inches, but the average form is approximately fourteen. Exceptional pestles have been found with lengths above eighteen inches and ranging up to twenty-seven. Along the Hudson River from Catskill to Glens Falls, and along the Seneca River, pestles have been found with the effigies of animal heads at the upper or handle ends. In most cases the head bends at a slight angle. Along the Seneca River some pestles seem to be phallic.

Stone Mortars. Stone mortars are not to be regarded as common, though one should not consider them rare. In proportion to the number of stone pestles, however, mortars are exceedingly scarce. Most of them are made from small boulders hollowed out, apparently, by considerable expenditure of time and energy. The cavities vary from mere hollows to cups three to five inches deep.

Metates. Most of the grinding or mealing stones found in Algonkian sites are flat pieces of shale or sandstone, of convenient size and thickness. One surface usually shows that it has been depressed and smoothed by the rubbing of a muller, and the reverse generally is pitted and scarred as if used as an anvil in the breaking of chert or other hard stones. It is quite likely that earthen pigments, burned stone and other hard mineral substances were reduced in mortars and metates, and that they

were not merely used in the preparation of vegetable meals and hominy, but for pulverizing in general.

Mullers. For grinding substances on the mealing stone mullers were used. Mullers are fairly common on sites of this culture and may be recognized by the smooth and slightly curved underside. The more finished types are discoid and well shaped. In many instances the edges seem to have been used for hammering, and thus, many of the finest specimens have a roughened circumference. Some mullers are polished on both sides and so nearly circular as to resemble quoits or game disks that might be rolled over the ice in contests of skill.

Celts. Stone hatchet heads, frequently called celts, and commonly found on Algonkian sites. There is a great degree of difference between the roughest of these specimens and the best. Some of the finest are highly polished and balanced with great nicety. The Algonkian people liked to bring out the grain of the stone and to reveal by polishing the mottling and banding of the layers. Some of the best specimens are of granitic rock, many are of diabase and a few are of sandstone. There are very few specimens of polished flint or chert. Celts reveal all the processes of manufacturing from the first rough chipping to the pitting process and the final polishing. There are some localities where celts appear to be better made than in others. The Seneca river region is noted for its beautifully formed celts and there are more than 200 in the Alvin H. Dewey collection, from the Genesee region.

In the ordinary symmetrical celt used by the Algonkian tribes there is little or nothing, save the site upon which it is found to distinguish it from specimens made and used by the Iroquoian peoples. In other words, the celt is common to nearly all forms of aboriginal culture and variations are only local, unless we except extreme forms. The size of Algonkian celts varies from a length of one inch to eleven or twelve. The average length is approximately five to six inches.

Adzes. A celt with one side more flattened than the other may be regarded as an adz. This is easily determinable when the cutting blade is flattened on one side and beveled on the other. Some adzes have a slightly concaved under side and

closely approach gouge forms. Adzes in general are finished with more care than celts. An interesting form of adz is that having beveled sides, that is to say with a cross-section an approximate oblong with the upper corners ground off. Most beveled adzes are made with great care, the plain surfaces are smooth and the entire blade is well polished. It seems definitely established that beveled adzes are original with one phase of the Algonkian culture in New York. They are seldom found elsewhere.



Plate VII.

Shallow mouthed gouge

Gouges. There are several types of gouges and as many variations of types as the individual makers could produce. All have curved cutting edges and are concaved on the under side. The backs may be round, flat or beveled. The types are those having, first, a short scoop, leaving the remainder of the implement ungrooved; second, the trough or channel running the entire length of the implement; third, either having knobs or a



Plate VIII.

Certain types of New York gouges. $x\frac{1}{2}$. 1, Lysander; 2, polished slate gouge, Clay; 3, knobbed back gouge of tough stone, Glens Falls; 4, small gouge with two grooves on back; 5, scoop mouth gouge, Ticonderoga; 6, combination adz and gouge, from Schoharie.

groove on the back for fastening the handle. Some gouges have the butt end sharpened as a chisel. Gouges when hafted were fastened much as adzes, to a **T** handle

Many Algonkian gouges are finely formed and polished. They are not as common as celts and as specimens are considered more valuable than adzes or celts.

Grooved Axes. The grooved axe is typical of the Algonkian culture. The Iroquois did not use it. In New York grooved

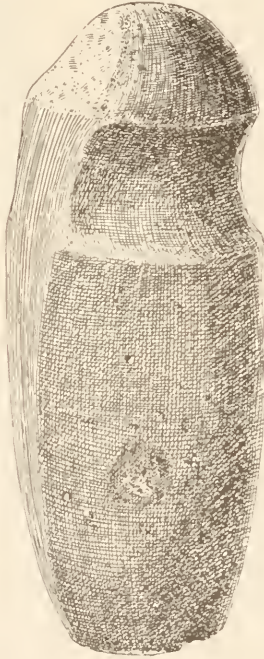


Plate IX.

Typical grooved axe.

axes are larger and heavier than any other form of hafted cutting blade, though small specimens are not wanting. So far as our knowledge goes, except for certain Long Island specimens, all New York forms have the groove at right angles to the medial line of the object, that is, straight across and not slanted. New York grooved axes are not fluted like some western forms.

Grooved axes in New York may be considered rare but they have been found in nearly all parts of the state where there are Algonkian sites. Some of the largest specimens come from the

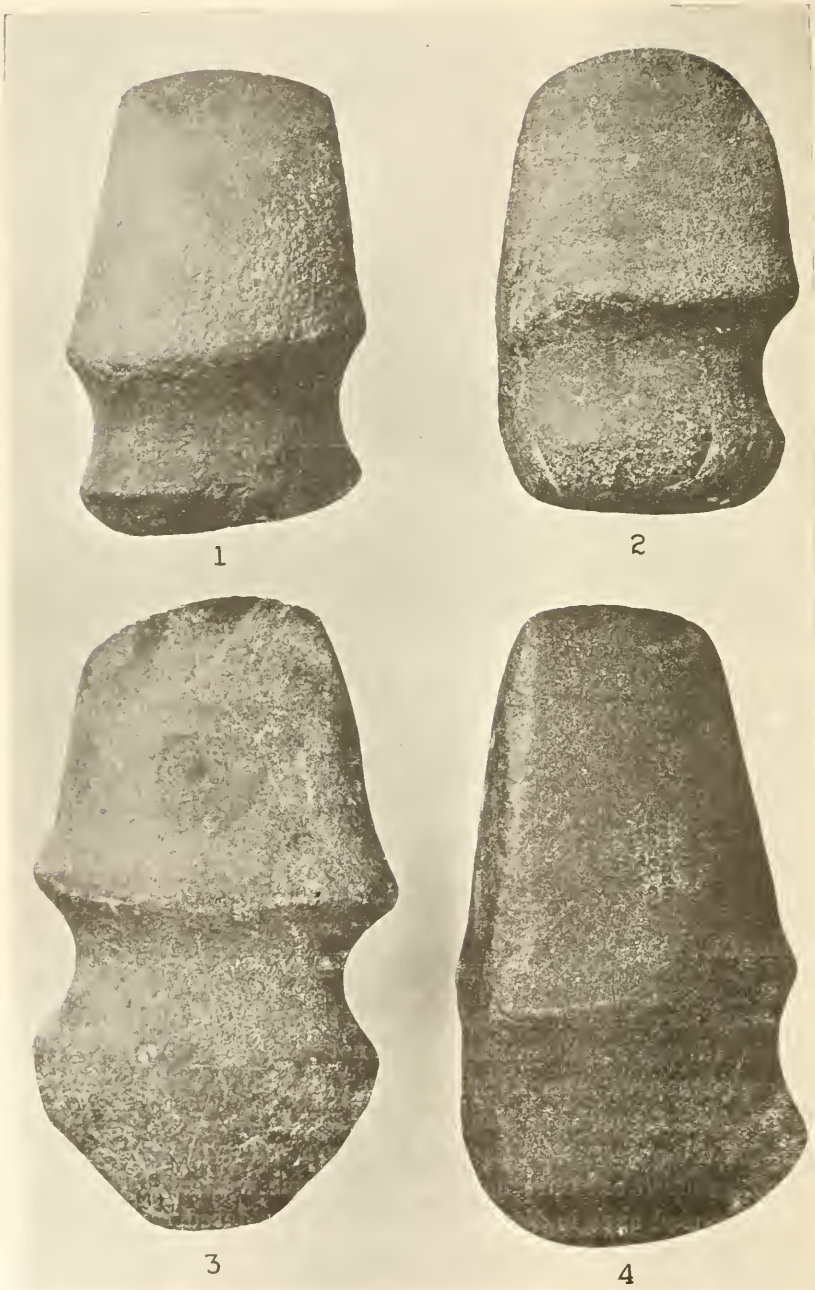


Plate X.

Types of New York grooved axes. $x\frac{1}{2}$. 1, Irving, Chautauqua Co.; 2, Versailles, Cattaraugus Co.; 3, Mount Morris; 4, Ticonderoga.

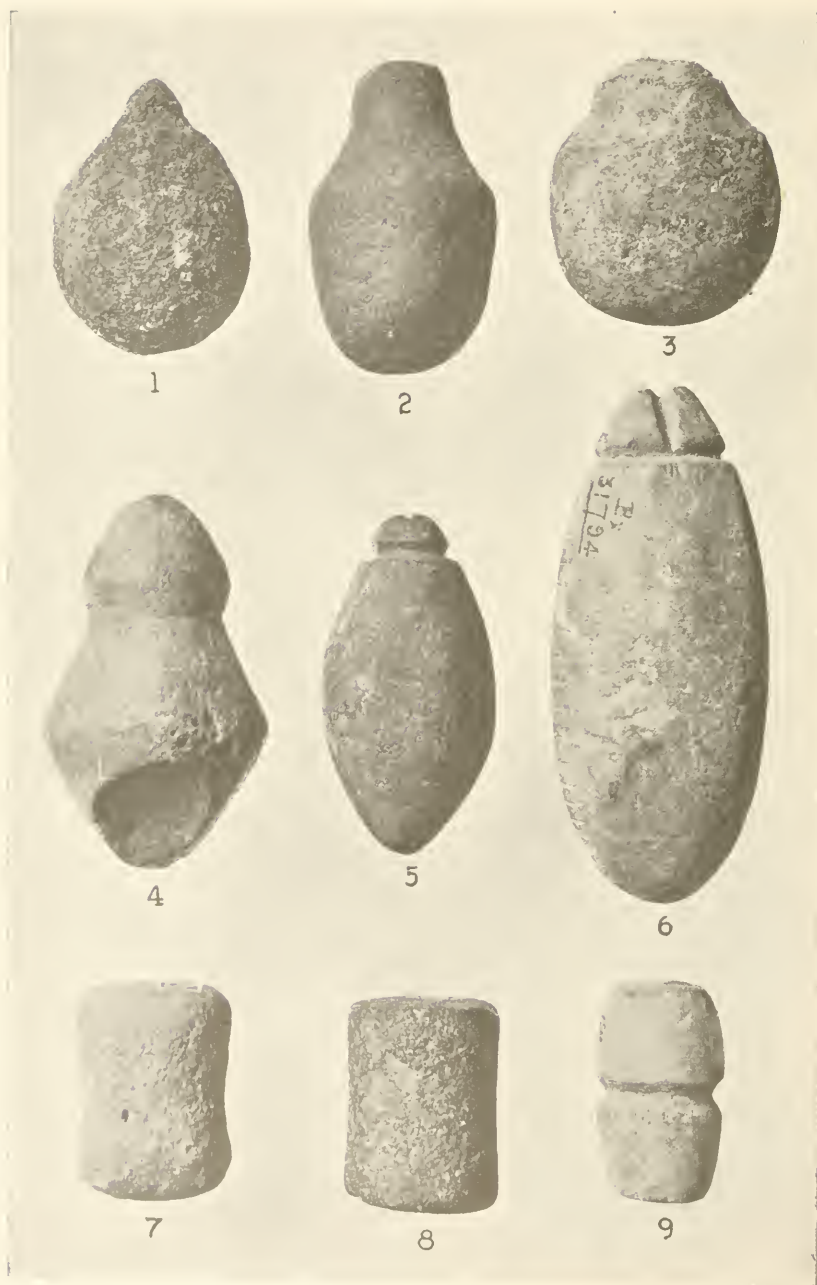
valley of the Hudson, Long Island, Westchester county and Staten Island.

Grooved Club Heads. These are considered rare objects. The State Museum has a number of specimens, some of which are made from natural pebbles of granite or other hard material, and some of hard rock dressed to shape and grooved. Some club heads show no rough usage, the rounded ends being quite smooth. Others seem to have been used as mauls or hammers. Club heads are always grooved on the short diameter.

Grooved Weights. In certain localities naturally formed ovate pebbles of quartz or other water-washed stone are grooved around the long diameter. The grooves are distinct and are picked or beaten in by percussion. Just what these objects are is not certain for they may have been used as bola stones, as net weights, or enclosed in rawhide envelopes as loose heads of small war clubs. They are found in western New York sparingly, along the Genesee, about Irondequoit Bay, in the Mohawk valley (rarely), in the Schoharie valley, about Otsego lake and along the Hudson. Many specimens have been found on Algonkian sites near Coxsackie.

Sinew Stones. Sand-stone pebbles are sometimes found, having the surfaces and edges abraided and worn in such a manner as to resemble large pieces of beeswax upon which cords or shoemaker's thread had been rubbed. Many of these implements are neatly made and the grooves are regular. They are commonly called "sinew stones" from the idea that they were used for smoothing thongs and sinew cords. This seems to be the possible use. A surprisingly large number are abruptly broken so that complete specimens are comparatively rare. Complete sinew stones are rarer than bird stones in New York.

Plummets. Stone plummets are among the rarer of the problematical objects found within the state. A number of specimens have been found along the Seneca river and near Oneida lake, others northward along Lake Champlain. Two fine specimens found by Prof. D. F. Thompson, collector, are of picked limestone and were found at Green Island, N. Y. They are similar to specimens from Maine. Other specimens of this



Plat. XI.

Bola stones, plummets and spool-shaped stones.

1. Bola from Patagonia; 2. North Trop; 3. Genesee Co.; 4. Brewerton; 5. Brewerton; 6. Lysander; 7-8 spool-shaped stones from Cox-sackie. Size: 2-3.

variety have been found along the Hoosick river which flows as a boundary between Washington and Rensselaer counties. Two specimens from Brewerton have necks less well defined with a groove running over the top. Another variety of plummets made of polished talc comes from Jefferson county. One specimen is cigar shaped with a knob being formed at the blunt end probably as a means of suspension. One from Lysander made from a natural pebble slightly worked has this same characteristic, but with the addition of tally marks on one side. A finely finished specimen is from Caughdenoy, Oswego county. Few of the plummets from this area are polished. Plummets do not occur on all Algonkian sites, and indeed, it is a question whether or not some of them do not belong to another culture quite different from that which we recognize as Algonkian. Grooved axes, gouges, wide arrow points and spears are associated with plummets.

Spool Shaped Objects. Stone spools picked from tough stone have been found along the Hudson river from Catskill to Glens Falls. They are simple cylinders concaved and are not more than two inches in length. The ends do not show usage.

Steatite Vessels. Fragments of soapstone pottery are found in nearly all parts of New York. Complete vessels in this state are extremely rare, only two specimens being in the State Museum. The great abundance of the fragments in certain localities shows a wide and prolonged use of this type of dish. Many fragments have lugs or projecting handles and some show perforations as if cracks had been tied by cords passed through holes on either side of the fracture.

One complete specimen was found in Saratoga county. It is a thick, heavy, ellipsoidal dish with lugs, and was used as a mortar for crushing red iron oxide. The pigment thickly encrusts the interior of the vessel. A second specimen is a small thin vessel shaped like a shallow ovate bowl. Unlike the first specimen it is smoothly finished throughout.

The Iroquois did not use steatite dishes and fragments are found only on Algonkian and on Eskimo-like sites. A few fragments have been found in the Genesee valley associated with bell pestles.

Faces or Heads of Stone. On certain Algonkian sites, particularly those influenced by the Delaware, effigies of human faces or heads are found. At least two such faces from the State are good pieces of aboriginal sculpture. The human features on these specimens are well modeled. Other specimens are more or less grotesque or conventionalized. Some are merely indicated by incised lines and others by dots or drilled depressions. The Delaware used faces of stone or wood in their ceremonies.



Plate XII.

Mic-mac pipes from Central New York. About 1-1.

Pipes. Stone pipes have been found on Algonkian sites, but they are not numerous. There are several forms, ranging from rude bowls to beautifully formed platform monitors. One typical form is that having a tubular bowl bent at a slight angle from a flattened or beveled stem. This form is sometimes copied in clay, though the stem is thicker and the bowl shorter. The material of the stone pipes is usually steatite, or some allied substance.

Mic-mac pipes, so-called, have a barrel-like bowl resting upon a rather slender short stem which sets upon a flattened rect-

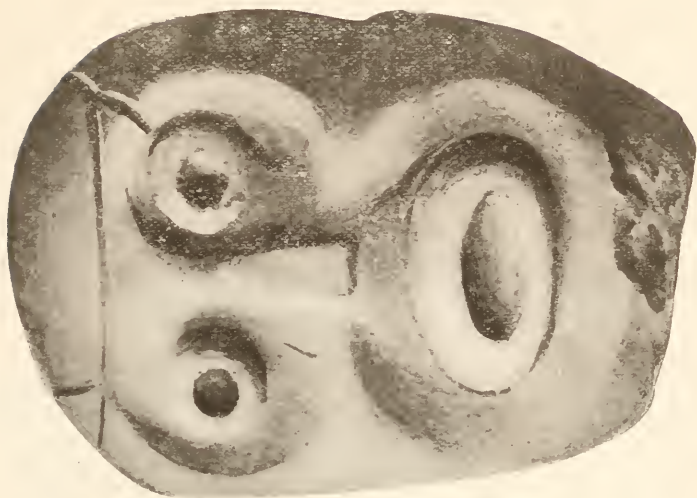


Plate XIII.
Stone human face effigies. 1 Chemung valley; 2 Mohawk valley. $\times \frac{7}{8}$.

angular projection. This may be decorated with incised lines and have a hole drilled through it. Micmacs are found in northern New York but may be considered fairly modern, some showing the marks of steel tools. They are the most ornamental forms of Algonkian stone pipes, some having animals carved in relief on the bowl.

Polished Stone Articles. On most Algonkian sites one or several forms of polished slate articles are found. Among these are banner stones, boat stones, bird stones, bar amulets and gorgets. Other minor forms are found, as pendants and perforated discoids. That these articles were used by the



Plate XIV.

Algonkian pots. 1 from Shinnecock Hills, L. I. 2 from Susquehanna valley. Shows Iroquoian influence. $\times\frac{1}{4}$.

Algonkian tribes is proved by finding them in process of manufacture on village sites and in "workshops". Such specimens are usually made of local stone, but finished articles may be and frequently are of extralimital materials, as Huronian slate. The polished slate culture is described in the chapter on the mound-building people.

It may be well to keep in mind that none of the polished slate "problematical forms" seems to be complete in itself, but appears rather to be parts of other and more complex objects. This makes the problem of determining their use all the more

difficult. It is significant that polished slates were used by both Algonkian and by the mound-building tribes. The Iroquois did not use them.

Pottery. Algonkian pottery in its fully developed form is distinctive, and an experienced collector soon learns to recognize it at a glance. Its characteristic features include both form and decoration, though in a measure the texture of the clay may also serve as a guide. Many Algonkian vessels are ovoid, with



Plate XV.

Pottery vessel of Algonkian type from Ouaquaga. Yager collection.
x 1-5.

the small end down and the large end open for the mouth of the jar. There is considerable variation as the accompanying illustration shows. The Iroquois exercised a considerable influence upon the Algonkian potters and it may be readily believed that the Algonkian people acquired by trade or otherwise

many Iroquois pots. In numerous instances potsherds and even completed vessels show how the Algonkian potter endeavored to imitate Iroquois decoration, but in most cases Algonkian technique betrays itself. The Iroquois made bold free strokes and his patterns were striking; the Algonkian imitator made fine uncertain lines and his attempts at patterns were "fussy". In



Plate XVI.

Algonkian pot from the Chenango river.

its external markings, however, the true Algonkian pottery was of three general sorts: (1) cord marked, as if the entire surface of the plastic clay had been wrapped in a coarse bag made of loosely woven fabric, or had been patted over by pads of coarse fabric; (2) stamped with wooden dies or impressed

with notched or checkered sticks; (3) marked over the body by natural objects such as sea shells, or by the edge of a scallop shell, bark reed, fingernail etc. Nearly all true Algonkian forms show impressed patterns, as opposed to the general Iroquois method of drawn patterns that dug into the clay and left the markings.

As a rule Algonkian pots not influenced by the Iroquois have no overhanging rims, and no collars. A vast number of Algonkian potsherds show that the decoration was carried over the rim and down into the neck of the pot.

Complete Algonkian vessels are not common and few museums have more than three or four specimens. Some found in fragments have been restored.



Plate XVII.

Algonkian pipe found by E. H. Gohl at Owasco Lake outlet.

Pottery Pipes. Algonkian pottery pipes in New York seldom approach the beauty of form or finish of either their own stone pipes or of Iroquois clay pipes. The earlier Algonkian clay pipes are crude, some being almost childish in modeling. In later sites there is considerable improvement until in some inland sites pipes have arrived at a definite form and are well made. Decoration is both by modeling and by impressed designs. Modeled ornamentation seems late and the result of external influence.

In shape, the Algonkian pipe takes several forms: (1) the

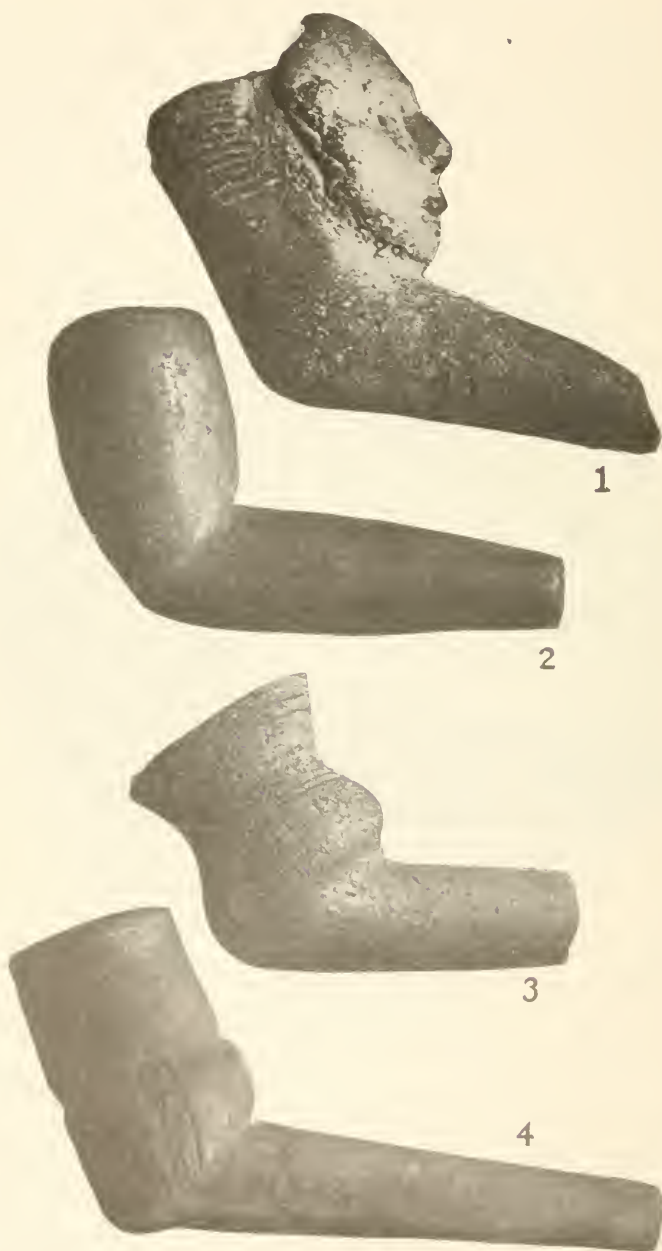


Plate XVIII.

Types of Algonkian Pipes from New York.

long, straight, conical tube with the bowl but slightly expanded, decorated and undecorated; (2) the bent tube, with the bowl having a slight upward turn; (3) the flat or thin beveled stem having a bowl at a slight angle, imitating stone forms; (4) the bowl at nearly right angles, the stem either round or slightly flattened, the whole resembling a bent human arm, the stem being the arm to the wrist and the bowl a portion of the upper arm. The elbow bend and the tip are copied in most instances. The real prototype may have been a bark tube or cornucopia with one end bent slightly upward for the bowl and the longer portion flattened out as a stem that could be conveniently held in the mouth. A little experimentation with a piece of birch bark will demonstrate the possibility of this.

Copper Implements. Articles of native copper are sometimes found on Algonkian sites; indeed, wherever polished slates are found copper objects may be expected. These include spearheads and arrowheads, gouges, chisels and adzes, small hatchets, mattocks, awls, fishhooks and bead ear ornaments. Copper articles are among the rarest of New York specimens. Most have been found on the surface but a number have been taken from mounds and from graves. Not all are Algonkian by any means; indeed it is doubtful if the New York Algonkins ever made copper implements. Those that they had were probably acquired from extralimital sources through trade or otherwise. They are probably of mound culture origin, the material coming either from Virginia or from the Lake Superior region. No native copper implements are tempered, the hardness that they do possess being due to the hammering and annealing process.

Bone and Antler Implements. Algonkian bone implements in New York may be considered relatively numerous and some sites, especially on the coast, along the St. Lawrence and about Oneida lake, have yielded several thousand good specimens and many more fragments. These articles include awls, beads, blades, harpoon heads, tubes, perforated teeth, arrowheads, antler punches, needles, shuttles, turtle shell cups, etc. Articles of



Plate XIX.

Certain types of New York harpoons. $\times \frac{3}{4}$. 1, 2, 3, 4, 6, 10 from Oneida lake sites; 5, 7, 8, 9 from Jefferson Co. shore sites.

walrus ivory are sometimes found along the St. Lawrence and pieces of cut whalebone have been found on Long Island.

Village Sites and Fortifications. Coastal Algonkian sites cover fairly large areas and are characterized by more or less extensive refuse deposits of marine shells intermingled with animal bones and other waste material and occasional specimens of ornaments and implements. Some of these shell heaps are as deep as eight or ten feet, though most have a depth of four feet and less. Some coastal sites have good occupational layers with refuse pits and fire holes. Central New York village sites are near lakes or large streams and spread out over a considerable acreage, as if the village or camp was either not compact or that it was moved about in the same general spot. Very few sites away from the coast have the thick deposits of solid refuse found in places of Iroquois occupation, which may have resulted from the Algonkian custom of throwing refuse on the surface, to be destroyed by rodents and the elements, and thus preventing the accumulation of intrusive debris in the ground.

There were several Algonkian sites near Plattsburg on Lake Champlain, others near Coxsackie and at Croton point on the Hudson; in Central New York, at Owaseo and Oneida lakes. Coastal sites have been described by Skinner and Harrington in American Museum publications.

The Algonkins built their villages on the flat land near navigable streams, and while they did have fortified refuges in the form of stockades, the remains of these are few and not impressive.

THE ESKIMO-LIKE CULTURE.

In various localities throughout the State there are sites that seem to have been occupied at a very early period. The implements found are few and crude, with now and then the anomaly of some wonderfully fine specimen. The fire pits show little refuse and almost no bone, save fragments calcined by heat. In some of these sites fire-cracked stones are abundant. Graves are shallow and show no trace of osseous substance.

So far we have described nothing especially characteristic,



Plate XX.

Slate knives and semi-lunar chopper from central New York sites. x 3-5
1, 2, Van Buren, Onondaga Co.; 3, Lysander; 4, Brewerton;
5, Glens Falls; 6, Hudson.

but when we discover on sites like these semilunar knives of slate and rubbed slate double-edged knives and projectile points, we have something as a guide. Associated with these objects are found fragments of soapstone pottery. Chert arrowheads are broad, large, and have sloping shoulders. Some are almost lozenge-shaped and many have thick, wide necks as if used as lance or harpoon heads. Celts and polished stone scrapers are found on these sites as also are chert scrapers and perforators. On a few of these sites bone harpoons have been found in ashy deposits. Dr. O. C. Auringer found a beautiful walrus ivory dirk in a fire pit near Troy and associated with it on the site crude and much weathered flints. In some sites of this general cultural horizon will be found gouges, hemispheres of hematite, figurines, ornaments of unusual shapes, and many other unfamiliar artifacts.

It is evident that sites of this character are not Iroquoian, that they are not of the clay pot using Algonkian tribes, and that there is little distinctive in them resembling the mound-building people, except for an occasional bird stone. A study leads to the conclusion that sites of this character were once occupied by a people influenced by the Eskimo, if not actually by the Eskimo themselves. Our investigation points out that the influence came from the north, especially the northeast.

It would be difficult to indicate any special center in this State from which this culture radiated. The area showing traces of this Eskimoan influence are: (1) the St. Lawrence basin to Clayton; (2) the east and south shore of Lake Ontario from Clayton to Irondequoit Bay; (3) the Genesee valley; (4) the Finger Lakes region, including the entire drainage basin; (5) the Champlain valley; (6) the Hudson valley to Albany. Scattered relics are found in Western New York and in the valleys of the Susquehanna and Delaware with their tributaries. The culture thins out as it ranges south, but it may be expected to appear in Vermont on the east and even in Massachusetts. Not much may be expected in either Pennsylvania or Ohio.

Many of these so-called Eskimoan sites appear to be of great antiquity, while others seem closely to approach the period of

the middle Algonkian tribes. Indeed certain Algonkian sites that date to the opening of the Colonial period seem in some ways to have been influenced by this northern culture. It is quite likely, therefore, that the period of influence was a lengthy one. We may even be permitted to ask several questions concerning the people who left these evidences, these questions to constitute the problem set forth for solution by students of archeology. First, we may ask were the people characterized by this culture Eskimoan? Second, if they were not of Eskimo stock, who were they? Were they Boethuck or Algonkin? Third, did not some undetermined people copy certain features of Eskimoan culture? Fourth, were these people exterminated, driven back to the north, or were they absorbed by later comers to perpetuate some of their arts?

It is possible that some time a painstaking student may discover and open up a site that will answer some if not all of these inquiries.

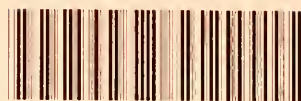




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